

CLAIMS

What is claimed is:

- 1 1. A method of dynamically mitigating a noncompliant password, the method
2 comprising the machine-implemented steps of:
3 obtaining a password from a user when the user attempts to access a service;
4 determining whether the password meets quality criteria; and
5 if the password does not meet the quality criteria, performing one or more responsive
6 actions that relate to accessing the service.
- 1 2. The method of Claim 1, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises:
3 if the password meets the quality criteria, granting to the user a first level of access to
4 the service, wherein the first level of access to the service is associated with
5 the quality criteria;
6 if the password meets a second quality criteria, granting to the user a second level of
7 access to the service, wherein the second level of access to the service is
8 associated with the second quality criteria, wherein the second quality criteria
9 is distinct from the quality criteria and wherein, if a particular password meets
10 the quality criteria, then the password meets the second quality criteria.
- 1 3. The method of Claim 1, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises performing one or more of:
3 logging information related to the password;
4 sending a report about the password;
5 generating an alert about the password;
6 forcing a password change; or
7 blocking the user's access to the service.

1 4. The method of Claim 1, wherein the method further comprises, if the password does
2 meet the quality criteria, providing user access to the service.

1 5. The method of Claim 1, wherein the step of determining whether the password meets
2 quality criteria further comprises one or more of the steps of:
3 performing a dictionary look-up based on the one or more symbols used in the
4 password;
5 checking the length of the one or more symbols used in the password;
6 checking the number of unique characters of the one or more symbols used in the
7 password;
8 checking the case of the characters in the one or more symbols used in the password;
9 checking the sequencing of characters in the one or more symbols used in the
10 password; or
11 performing statistical analysis based on the one or more symbols used in the
12 password.

1 6. The method of Claim 1, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises logging information related to the
3 password.

1 7. The method of Claim 1, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises sending a report about the password.

1 8. The method of Claim 1, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises generating an alert about the password.

1 9. The method of Claim 1, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises forcing a password change.

- 1 10. The method of Claim 1, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises blocking the user's access to the
3 service.
- 1 11. The method of Claim 1, wherein obtaining the password from the user comprises
2 obtaining the password from the user via a graphical user interface.
- 1 12. The method of Claim 1, wherein obtaining the password from the user comprises
2 obtaining the password from the user via an electronic interface.
- 1 13. The method of Claim 1, wherein the method further comprises the step of
2 determining a quality score for the password, and wherein the step of determining whether
3 the password meets quality criteria comprises comparing the quality score to a predefined
4 threshold value.
- 1 14. The method of Claim 1, further comprising the steps of:
2 obtaining the password from a repository of passwords;
3 making a first determination whether the password meets quality criteria; and
4 storing in a particular machine-readable medium an indication of the first
5 determination for the password;
6 wherein the step of determining whether the password meets quality criteria
7 comprises accessing the particular machine-readable medium.
- 1 15. The method of Claim 1, wherein the user is associated with a particular user role, and
2 wherein determining whether the password meets quality criteria comprises determining
3 whether the password meets quality criteria for the particular user role.
- 1 16. The method of Claim 1, wherein determining whether the password meets quality
2 criteria comprises determining whether the password meets quality criteria for the service.

1 17. The method of Claim 1, wherein the step of obtaining the password comprises an
2 access service obtaining the password from the user when the user attempts to access the
3 service, and wherein the access service comprises machine executable instructions executing
4 on a particular machine, and the service comprises machine executable instruction executing
5 on the same particular machine.

1 18. The method of Claim 1, wherein the step of obtaining the password comprises an
2 access service obtaining the password from the user when the user attempts to access the
3 service, and wherein the access service comprises machine executable instructions executing
4 on a first machine and the service comprises machine executable instructions executing on a
5 second machine, wherein the first machine is distinct from the second machine.

1 19. A method of dynamically mitigating a noncompliant password, the method
2 comprising the machine-implemented steps of:
3 obtaining a password from a user when the user attempts to access a service;
4 determining whether the password meets quality criteria; and
5 if the password does not meet the quality criteria, performing one or more of:
6 forcing a password change; or
7 blocking the user's access to the service; and
8 wherein the step of determining whether the password meets quality criteria further
9 comprises one or more of the steps of:
10 performing a dictionary look-up based on the one or more symbols used in the
11 password;
12 checking the length of the one or more symbols used in the password;
13 checking the number of unique characters of the one or more symbols used in
14 the password;
15 checking the case of the characters in the one or more symbols used in the
16 password;
17 checking the sequencing of characters in the one or more symbols used in the
18 password; or

19 performing statistical analysis based on the one or more symbols used in the
20 password.

1 20. A machine-readable medium carrying one or more sequences of instructions for
2 dynamically mitigating a noncompliant password, which instructions, when executed by one
3 or more processors, cause the one or more processors to carry out the steps of:
4 obtaining a password from a user when the user attempts to access a service;
5 determining whether the password meets quality criteria; and
6 if the password does not meet the quality criteria, performing one or more responsive
7 actions that relate to accessing the service.

1 21. The machine-readable medium of Claim 20, wherein the step of performing one or
2 more responsive actions that relate to accessing the service comprises:
3 if the password meets the quality criteria, granting to the user a first level of access to
4 the service, wherein the first level of access to the service is associated with
5 the quality criteria;
6 if the password meets a second quality criteria, granting to the user a second level of
7 access to the service, wherein the second level of access to the service is
8 associated with the second quality criteria, wherein the second quality criteria
9 is distinct from the quality criteria and wherein, if a particular password meets
10 the quality criteria, then the password meets the second quality criteria.

1 22. The machine-readable medium of Claim 20, wherein the step of performing one or
2 more responsive actions that relate to accessing the service comprises performing one or
3 more of:
4 logging information related to the password;
5 sending a report about the password;
6 generating an alert about the password;
7 forcing a password change; or
8 blocking the user's access to the service.

1 23. The machine-readable medium of Claim 20, further comprising instructions which,
2 when executed by the one or more processors, cause the one or more processors to carry out
3 the step of, if the password does meet the quality criteria, providing user access to the
4 service.

1 24. The machine-readable medium of Claim 20, wherein the step of determining whether
2 the password meets quality criteria further comprises one or more of the steps of:
3 performing a dictionary look-up based on the one or more symbols used in the
4 password;
5 checking the length of the one or more symbols used in the password;
6 checking the number of unique characters of the one or more symbols used in the
7 password;
8 checking the case of the characters in the one or more symbols used in the password;
9 checking the sequencing of characters in the one or more symbols used in the
10 password; or
11 performing statistical analysis based on the one or more symbols used in the
12 password.

1 25. The machine-readable medium of Claim 20, wherein the step of performing one or
2 more responsive actions that relate to accessing the service comprises logging information
3 related to the password.

1 26. The machine-readable medium of Claim 20, wherein the step of performing one or
2 more responsive actions that relate to accessing the service comprises sending a report about
3 the password.

1 27. The machine-readable medium of Claim 20, wherein the step of performing one or
2 more responsive actions that relate to accessing the service comprises generating an alert
3 about the password.

1 28. The machine-readable medium of Claim 20, wherein the step of performing one or
2 more responsive actions that relate to accessing the service comprises forcing a password
3 change.

1 29. The machine-readable medium of Claim 20, wherein the step of performing one or
2 more responsive actions that relate to accessing the service comprises blocking the user's
3 access to the service.

1 30. The machine-readable medium of Claim 20, wherein obtaining the password from the
2 user comprises obtaining the password from the user via a graphical user interface.

1 31. The machine-readable medium of Claim 20, wherein obtaining the password from the
2 user comprises obtaining the password from the user via an electronic interface.

1 32. The machine-readable medium of Claim 20, further comprising instructions which,
2 when executed by the one or more processors, cause the one or more processors to carry out
3 the step of determining a quality score for the password, and wherein the step of determining
4 whether the password meets quality criteria comprises comparing the quality score to a
5 predefined threshold value.

1 33. The machine-readable medium of Claim 20, further comprising instructions which,
2 when executed by the one or more processors, cause the one or more processors to carry out
3 the steps of:

4 obtaining the password from a repository of passwords;
5 making a first determination whether the password meets quality criteria; and
6 storing in a particular machine-readable medium an indication of the first
7 determination for the password;
8 and wherein the step of determining whether the password meets quality criteria
9 comprises accessing the particular machine-readable medium.

1 34. The machine-readable medium of Claim 20, wherein the user is associated with a
2 particular user role, and wherein determining whether the password meets quality criteria
3 comprises determining whether the password meets quality criteria for the particular user
4 role.

1 35. The machine-readable medium of Claim 20, wherein determining whether the
2 password meets quality criteria comprises determining whether the password meets quality
3 criteria for the service.

1 36. An apparatus for dynamically mitigating a noncompliant password, comprising:
2 means for obtaining a password from a user when the user attempts to access a
3 service;
4 means for determining whether the password meets quality criteria; and
5 means for performing one or more responsive actions that relate to accessing the
6 service if the password does not meet the quality criteria.

1 37. The apparatus of Claim 36, wherein the means for performing one or more responsive
2 actions that relate to accessing the service comprises:
3 means for granting to the user a first level of access to the service, if the password
4 meets the quality criteria, wherein the first level of access to the service is
5 associated with the quality criteria;
6 means for granting to the user a second level of access to the service, if the password
7 meets a second quality criteria, wherein the second level of access to the
8 service is associated with the second quality criteria, wherein the second
9 quality criteria is distinct from the quality criteria and wherein, if a particular
10 password meets the quality criteria, then the password meets the second
11 quality criteria..

1 38. The apparatus of Claim 36, wherein the means for performing one or more responsive
2 actions that relate to accessing the service comprises one or more of:

- 3 means for logging information related to the password;
- 4 means for sending a report about the password;
- 5 means for generating an alert about the password;
- 6 means for forcing a password change; or
- 7 means for blocking the user's access to the service.

1 39. The apparatus of Claim 36, wherein the apparatus further comprises means for
2 providing user access to the service if the password does meet the quality criteria.

1 40. The apparatus of Claim 36, wherein the means for determining whether the password
2 meets quality criteria further comprises one or more of:

- 3 means for performing a dictionary look-up based on the one or more symbols used in
4 the password;
- 5 means for checking the length of the one or more symbols used in the password;
- 6 means for checking the number of unique characters of the one or more symbols used
7 in the password;
- 8 means for checking the case of the characters in the one or more symbols used in the
9 password;
- 10 means for checking the sequencing of characters in the one or more symbols used in
11 the password; or
- 12 means for performing statistical analysis based on the one or more symbols used in
13 the password.

1 41. The apparatus of Claim 36, wherein the means for performing one or more responsive
2 actions that relate to accessing the service comprises means for logging information related
3 to the password.

1 42. The apparatus of Claim 36, wherein the means for performing one or more responsive
2 actions that relate to accessing the service comprises means for sending a report about the
3 password.

1 43. The apparatus of Claim 36, wherein the means for performing one or more responsive
2 actions that relate to accessing the service comprises means for generating an alert about the
3 password.

1 44. The apparatus of Claim 36, wherein the means for performing one or more responsive
2 actions that relate to accessing the service comprises means for forcing a password change.

1 45. The apparatus of Claim 36, wherein the means for performing one or more responsive
2 actions that relate to accessing the service comprises means for blocking the user's access to
3 the service.

1 46. The apparatus of Claim 36, wherein the means for obtaining the password from the
2 user comprises means for obtaining the password from the user via a graphical user interface.

1 47. The apparatus of Claim 36, wherein the means for obtaining the password from the
2 user comprises means for obtaining the password from the user via an electronic interface.

1 48. The apparatus of Claim 36, wherein the apparatus further comprises means for
2 determining a quality score for the password, and wherein the means for determining whether
3 the password meets quality criteria comprises means for comparing the quality score to a
4 predefined threshold value.

1 49. The apparatus of Claim 36, further comprising:
2 means for obtaining the password from a repository of passwords;

3 means for making a first determination whether the password meets quality
4 criteria; and
5 means for storing in a particular machine-readable medium an indication of
6 the first determination for the password;
7 and wherein the means for determining whether the password meets quality criteria
8 comprises means for accessing the particular machine-readable medium.

1 50. The apparatus of Claim 36, wherein the user is associated with a particular user role,
2 and wherein means for determining whether the password meets quality criteria comprises
3 means for determining whether the password meets quality criteria for the particular user
4 role.

1 51. The apparatus of Claim 36, wherein means for determining whether the password
2 meets quality criteria comprises means for determining whether the password meets quality
3 criteria for the service.

1 52. The apparatus of Claim 36, wherein the means for obtaining the password comprises
2 means for an access service to obtain the password from the user when the user attempts to
3 access the service, and wherein the access service comprises means for executing on a
4 particular machine, and wherein the service comprises means for executing on the same
5 particular machine.

1 53. The apparatus of Claim 36, wherein the means for obtaining the password comprises
2 means for an access service to obtain the password from the user when the user attempts to
3 access the service, and wherein the access service comprises means for executing on a first
4 machine and the service comprises means for executing on a second machine, wherein the
5 first machine is distinct from the second machine.

1 54. An apparatus for dynamically mitigating a noncompliant password, comprising:
2 a network interface that is coupled to the data network for receiving one or more packet
3 flows therefrom;
4 a processor;
5 one or more stored sequences of instructions which, when executed by the processor, cause
6 the processor to carry out the steps of:
7 obtaining a password from a user when the user attempts to access a service;
8 determining whether the password meets quality criteria; and
9 if the password does not meet the quality criteria, performing one or more responsive
10 actions that relate to accessing the service.

1 55. The apparatus of Claim 54, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises:
3 if the password meets the quality criteria, granting to the user a first level of access to
4 the service, wherein the first level of access to the service is associated with
5 the quality criteria;
6 if the password meets a second quality criteria, granting to the user a second level of
7 access to the service, wherein the second level of access to the service is
8 associated with the second quality criteria, wherein the second quality criteria
9 is distinct from the quality criteria and wherein, if a particular password meets
10 the quality criteria, then the password meets the second quality criteria.

1 56. The apparatus of Claim 54, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises performing one or more of:
3 logging information related to the password;
4 sending a report about the password;
5 generating an alert about the password;
6 forcing a password change; or
7 blocking the user's access to the service.

1 57. The apparatus of Claim 54, wherein the apparatus further comprises one or more
2 stored sequences of instructions which, when executed by the processor, cause the processor
3 to carry out the step of, if the password does meet the quality criteria, providing user access
4 to the service.

1 58. The apparatus of Claim 54, wherein the step of determining whether the password
2 meets quality criteria comprises one or more of the steps of:
3 performing a dictionary look-up based on the one or more symbols used in the
4 password;
5 checking the length of the one or more symbols used in the password;
6 checking the number of unique characters of the one or more symbols used in the
7 password;
8 checking the case of the characters in the one or more symbols used in the password;
9 checking the sequencing of characters in the one or more symbols used in the
10 password; or
11 performing statistical analysis based on the one or more symbols used in the
12 password.

1 59. The apparatus of Claim 54, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises logging information related to the
3 password.

1 60. The apparatus of Claim 54, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises sending a report about the password.

1 61. The apparatus of Claim 54, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises generating an alert about the password.

1 62. The apparatus of Claim 54, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises forcing a password change.

1 63. The apparatus of Claim 54, wherein the step of performing one or more responsive
2 actions that relate to accessing the service comprises blocking the user's access to the
3 service.

1 64. The apparatus of Claim 54, wherein obtaining the password from the user comprises
2 obtaining the password from the user via a graphical user interface.

1 65. The apparatus of Claim 54, wherein obtaining the password from the user comprises
2 obtaining the password from the user via an electronic interface.

1 66. The apparatus of Claim 54, wherein the apparatus further comprises one or more
2 stored sequences of instructions which, when executed by the processor, cause the processor
3 to carry out the step of determining a quality score for the password, and wherein the step of
4 determining whether the password meets quality criteria comprises comparing the quality
5 score to a predefined threshold value.

1 67. The apparatus of Claim 54, further comprising one or more stored sequences of
2 instructions which, when executed by the processor, cause the processor to carry out the steps
3 of:

4 obtaining the password from a repository of passwords;
5 making a first determination whether the password meets quality criteria; and
6 storing in a particular machine-readable medium an indication of the first
7 determination for the password;
8 and wherein the step of determining whether the password meets quality criteria
9 comprises accessing the particular machine-readable medium.

1 68. The apparatus of Claim 54, wherein the user is associated with a particular user role,
2 and wherein determining whether the password meets quality criteria comprises determining
3 whether the password meets quality criteria for the particular user role.

1 69. The apparatus of Claim 54, wherein determining whether the password meets quality
2 criteria comprises determining whether the password meets quality criteria for the service.

1 70. The apparatus of Claim 54, wherein the step of obtaining the password comprises an
2 access service obtaining the password from the user when the user attempts to access the
3 service, and wherein the access service comprises machine executable instructions executing
4 on the apparatus, and the service comprises machine executable instruction executing on the
5 same apparatus.

1 71. The apparatus of Claim 54, wherein the step of obtaining the password comprises an
2 access service obtaining the password from the user when the user attempts to access the
3 service, and wherein the access service comprises machine executable instructions executing
4 on a first machine and the service comprises machine executable instructions executing on a
5 second machine, wherein the first machine is distinct from the second machine.